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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,176	04/09/2004	Hidehisa Konishi	100689.53976US	8409
23911	7590	10/20/2005	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			GLEITZ, RYAN M	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EV

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/821,176		KONISHI, HIDEHISA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ryan Gleitz		2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/23/04</u> .   | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Drawings***

Figures 4-7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kouchi (JP 11-065397).

Kouchi discloses an image forming apparatus including a belt member shown in figure 1. The apparatus includes an intermediate transfer belt (2), a driving roller (20) for driving the belt member (2), a follower roller as opposite roll (23), a tension roller (22) for tensioning the belt

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member (2), the tension roller (22) being located at the position remoter than the position of the follower roller (23) from the driving roller (20), the distance between the driving roller (20) and the follower roller (23) being longer than that between the follower roller (23) and the tension roller (22). For a description of the rollers see translation paragraph [0024], and for the relative distances see figure 1.

Referring to figure 2(b), sensor (4) is an image detecting means located at a position facing the belt member (2) between, in a counterclockwise direction, the driving roller (20) and follower roller (23) for detecting the toner image on the belt member (2). Shaft (21a) and roll (21) are a contact member contacting the inside surface of the belt member (21) at the position facing the image detecting means (4) across the belt member (2) to push the belt member toward the image detecting means (4).

Regarding claim 2, the belt member (2), driving roller (20), follower roller (23), and tension roller (22) are integrated as a belt unit, and the contact member (21) is attached to the belt unit. See [0036].

Regarding claim 3, the contact member (21, 21a) includes a shaft member which is supported for rotation in the belt unit such that the outer perimeter thereof contacts the inside surface of the belt member.

Regarding claim 4, figure 4 shows the casing of the apparatus is provided with a supporting frame, including unit frames (41) and side frames (51), with the image detecting means (4) attached thereto, the supporting frame has at least two supporting recesses (60, 70) for supporting the shaft member, and the image detecting means (4) is fixed to the supporting frame

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(41, 51) such that the image detecting means faces the line, as shown in figure 2(b), connecting the centers of the supporting recesses.

Regarding claim 5, the belt unit is detachable to the casing of the apparatus, [0036], and the shaft member comes to be supported in the supporting recesses when the belt unit is mounted to the casing of the apparatus, as shown by figure 4.

#### ***Other Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsuyama (JP 11-015218) disclose a pattern detecting device including a pair of roller arranged opposing the detecting device to reduce the effects of vibration.

Hirai et al. (JP 11-220586) disclose a pattern image sensor opposite a part of the belt stretch between two rollers.

Yamanaka et al. (JP 2003-076111) disclose sensor opposite a transport roller to reduce the effects of wave undulation of the belt.

Komiya et al. (US 5,768,671) disclose a misregistration sensor opposite a contact member as shown in figure 19.

#### ***Contact Information***

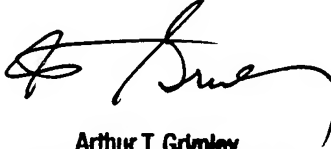
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Arthur T. Grimley  
Supervisory Patent Examiner  
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